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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,572	10/12/2001	Jefferson Shingleton	557.003PA	8725

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EXAMINER

YIP, WINNIE S

ART UNIT

PAPER NUMBER

3637

DATE MAILED: 01/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/975,572

Applicant(s)

SHINGLETON, JEFFERSON

Examiner

Winnie Yip

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 4-7 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8-14 and 16-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This is a first office action for application Serial No. 09/975,572 filed October 12, 2001.

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

- a. Group I, a first embodiment, shown in Figs. 1-7;
- b. Group II, a second embodiment, shown in Figs. 8-9;
- c. Group III, a third embodiment, shown in Figs. 10-12;
- d. Group IV, a third embodiment, shown in Fig. 13.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1, 9, and 14 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2. During a telephone conversation with Mr. Molldrem on December 18, 2002, a provisional election was made without traverse to prosecute the invention of Group I, claims 1-3, 8-14, and 16-19. Affirmation of this election must be made by applicant in replying to this Office action. Claims 4-7 and 15 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

3. Claim 3 is objected to because of the following informalities: the recited sub combination feature "the stem portion has a width sufficient to span across said channel member and A lower surface with a contoured ends that continue over edges of the channel member" does not appear to consist with the limitation of the body of the claim because the channel member only functionally recited in the preamble. If applicant wants to claim combination, all structural limitations must be positively claimed. If not, the structural limitation which is not part of the claimed invention must be functionally recited as relative to the claimed invention. If applicant intends to claim a fastener per se, he/she should claim all features of that functionally relative to those elements not in the claimed invention. Due to the

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confusion, the claim is being treated as a sub combination on the merits. Appropriate correction is required.

4. Claims 9 and 14 are objected to because the recited features “a channel nut adapted to engage ..said channel member” (claim 9, line 11) and “adapted to receive at least one threaded fastener member” (claim 14, line 6) do not appear to consist with the limitation of the body of the claim. If applicant intends to claim a combination, all structural limitation such as “a channel nut” and “the channel member” must be positively claimed. Due to the confusion, the claim 1 is being treated as a combination on the merits. Appropriate correction is required.

5. Claim 8 is objected to because of the following informalities: the term “threaded fastener” (line 1) should read “threaded fastener member”. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

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7. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Macadam (US Patent No. 3,210,716).

Macadam shows and discloses a fastener arrangement comprising a clip member (50) having a generally T-shaped profile with a stem portion (54) with opposed flat sides (55, 55a) and a cap portion (53), a threaded fastener member being a bolt (70) rotatable in the stem portion and extending downward from the cap, and a channel nut (60) having a female threads to receive the threaded fastener member therein, and the channel nut adapted to engage the inwardly facing flanges of a channel member (20), and the fastener arrangement capably used for attaching solar panels on a rack of the channel members.

8. Claims 1-3, 8-9, 14, 17, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Tomiuchi et al. (US Patent No. 6,105,317).

Tomiuchi et al. shows and teaches a solar collector arrangement comprising a plurality of parallel rows of solar panels (10), each row including: a rack (40) having an elongated channel member with an elongated slot (45) and a pair of inwardly facing flanges (43, 44), a plurality of flat generally solar panels (10) being disposed on the top surface of the rack, a fastener arrangement comprising a clip member having a generally T-shaped profile with a stem portion (51) with opposed flat sides to engage the slot of the rack and a cap portion (50) engaging respective edges of the solar panels, a lower surface of the stem portion having a contoured ends to continue over edges of the channel member, a threaded fastener member (54) being a bolt rotatable in the stem portion and extending downward from the cap, and a channel nut or retainer member (53) having a female threads to receive the threaded fastener member therein, and the

channel nut/ or retainer member engaging the inwardly facing flanges of a channel member (40), and the threaded fastener member being rotated to clamp the clip member to the edges of the adjacent panels on the rack of channel members.

Regard to claim 8, Tomiuchi et al. further teaches the clip member may have more than one fastener members rotatable in the stem portion and a channel nut having corresponding female threads to receiving the threaded fastener members for larger clip member to be used.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomiuchi et al. '317 as applied to claims 9, 14 above, and further in view of Hanoka et al. '720.

The claims are considered to meet by Tomiuchi et al. as explained and applied above rejections except that Tomiuchi et al. does not define the solar collector arrangement comprising at least one strip of glazing material positioned between the solar panels and the rack as claimed. Hanoka et al. teach a glazing panel having at least one strip of glazing material (42) being adhesively mounted on one edge of the glazing panel (30) and a frame (40) for providing a cushioning between the glazing panel and the frame. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the solar connector arrangement of Tomiuchi et al. having at least one strip of glazing material along an edge of the

glazing panel and adhesively secured to the support rack as taught by Hanoka et al. for providing a cushioning between the solar panel and the support element.

11. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomiuchi et al. '317 as applied to claims 9, 14 above, and further in view of Peterson (US Patent No. 4,207,868).

The claim is considered to meet by Tomiuchi et al. as explained and applied above rejections except that Tomiuchi et al. does not define the solar collector arrangement comprising at least one extruded resilient filler gasket disposed between adjacent the solar panels at one or both sides of the fastener arrangement. Peterson teaches a solar collector arrangement comprising an extruded resilient filler gasket (93) as claimed and be disposed between adjacent solar panels for sealing and holding adjacent solar panels together. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the solar collector arrangement of Tomiuchi et al. further including at least one extruded resilient filler gasket disposed between the adjacent solar panels between the fasteners as taught by Peterson for sealing the spaces between the panels and the fasteners.

12. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tomiuchi et al. '317 as applied to claims 9, 14 above, and further in view of Garvison et al. (US Patent No. 6,111,189).

The claim is considered to meet by Tomiuchi et al. as explained and applied above rejections except that Tomiuchi et al. does not define the solar collector arrangement further

comprising running electrical wires carrying power from the panels through a wireway formed in the rack (or support beam) as claimed. Garvison et al. teach an obvious solar collector arrangement comprising a solar collecting panel (14) being supported by an elongate rack (170) having a wireway (194, 202) for running electrical wires (196, 164) carrying power from the panels. It would have been obvious to one ordinary skill in the art at the time the invention was made to modify the solar connecting arrangement, as old and well known in the art, having a wireway formed in a supporting rack as taught by Garvison et al. for providing a position to allow running electrical wires therethrough the solar panels.

Citations

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Roberts '874, Adams '481, Miller '239, and Dietrich '465 teach various fasteners having structural limitations as similar to the claimed invention. Kadonome et al. '338, Barker '595, and Pierce-Bjorklund '865 teach various solar connector arrangement comprising fastener arrangement for holding solar panels to racks as similar to the claimed invention.

Inquiry Contacts

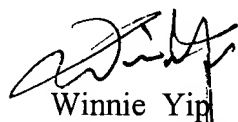
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Winnie Yip whose telephone number is 703-308-2491. The examiner can normally be reached on M-F (9:30-6:30), Second Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 703-308-2486. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.



Winnie Yip
Patent Examiner
Art Unit 3637

wsy
January 13, 2003